

# Betting on Yourself: Regaining and Maintaining Confidence as a Woman in Computing

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## Abstract

Women in technical fields may face gender bias, impostor syndrome, and stereotype threats on a daily basis. Other sessions at GHC educate and create awareness about these issues, but few address the secondary and more enduring effect of these issues: fluctuations in confidence. This BOF will focus on discussions about regaining and maintaining confidence and will equip attendees with a toolbox of practical techniques that they can use for coping with fluctuations in confidence.

## Overview

Research has shown that women do not abandon technical degree programs because of a lack of skills or poor academic performance. In fact, women who drop out of engineering degree programs in college are more likely to have a higher grade point average than their male counterparts [2]. While there are many internal and external factors affecting persistence to pursue a technical degree, one dominant factor is a woman's confidence and self-efficacy beliefs [4]. Given the importance of confidence in retaining women in computing-related fields, this session will focus on *providing practical advice and hands-on practice in skills for increasing confidence*. This is a topic that perhaps every female attendee can relate to.

The cultures of many technical fields, including Computer Science, are filled with explicit and implicit reminders that these are male-dominated fields [3]. Despite the progress made in improving women's access to participation in the technical work force, gender bias and stereotypes remain. Moreover, women in technical fields may be especially prone to the impostor syndrome, in which those affected believe that success is due to luck and hard work rather than intelligence. In these situations, one may erroneously believe that she is less capable than those around her [1]. All of these factors may lead to women losing confidence and even worse leaving the technical field.

## Format

Our session will address confidence dips that occur at different stages across a woman's technical career. These include negative performance reviews or after taking maternity leave. One key factor that has demonstrated an increase in confidence is *identifying with other women who have faced similar problems and successfully overcome them*. The goal of our session is to encourage discussion

about situations that can cause a lack of confidence, and then to share recommendations and best practices on how to rebound after such experiences. To do this, our session will be divided into three parts: introduction of panelists (10 minutes); tips for regaining and maintaining confidence (20 minutes), confidence building activity (10 minutes), and discussion with the attendees (20 minutes).

Attendees will leave the session with the knowledge that fluctuations in confidence is a problem that can affect any woman in computing no matter her age, status, or rank. They will additionally have techniques for boosting their confidence and will have practiced using them during the session.

## Panelists

To provide a range of experiences, we have selected panelists from different technical backgrounds. Panelists include:

- **Jamike Burge**, Senior Behavioral Computer Scientist at Information Systems Worldwide.
- **Robin Jeffries**, User Experience Analyst at Google.
- **Tejinder Judge**, PhD candidate in Computer Science at Virginia Tech.
- **Erika Poole**, Assistant Professor at Pennsylvania State University.
- **Laurian Vega**, Human Factors Engineer at Next Century.

## References

- [1] Clance, P.R. and S. Imes, The Imposter Phenomenon in High Achieving Women: Dynamics and Therapeutic Intervention. *Psychotherapy Theory, Research and Practice*, 1978. 15(3).
- [2] Nauta, M.M., D.L. Epperson and K.M. Waggoner, Perceived Causes of Success and Failure: Are Women's Attributions Related to Persistence in Engineering Majors? *Journal of Research in Science Teaching*, 1999. 36(6).
- [3] Quinn, S.J.S.M.S.M., Stereotype Threat and Women's Math Performance. *Journal of Experimental Social Psychology*, 1999. 35(1).
- [4] Rayman, P. and B. Brett, Women Science Majors: What Makes a Difference in Persistence after Graduation? *The Journal of Higher Education*, 1995. 66(4).